

VASCULAR IMAGES

A giant common carotid artery pseudoaneurysm after penetrating injury

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A 55-year-old man presented with an enlarging tender pulsatile mass over the right side of the neck. There was a history of an antecedent penetrating trauma by a pedicure knife with a small entry wound, which was debrided at a local hospital 1 week before this admission.

A carotid artery computed tomography angiogram revealed a 5.5 × 6.5 cm pseudoaneurysm of the right common carotid artery that was partially thrombosed (*A* and *B*; Cover). There was no evidence of fluid collection or edema that could indicate infection.

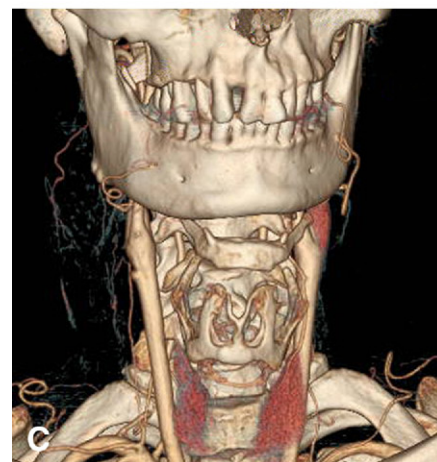
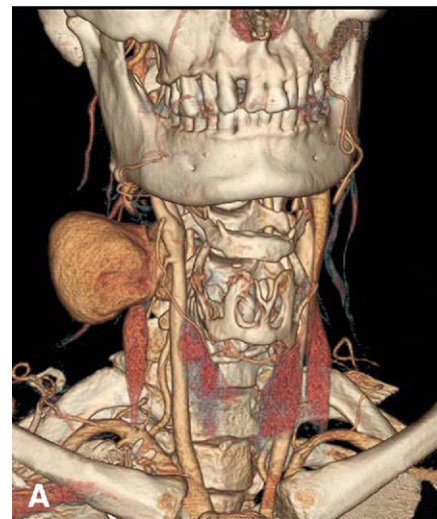
On examination, the patient had hoarseness in his voice with an irritating cough with eating indicating that the aneurysm was most likely compressing the recurrent laryngeal nerve.

DISCUSSION

True or false aneurysms of the carotid arteries are very rare entities. Most of the false aneurysms are iatrogenic due to attempted jugular venous catheter insertion or blunt carotid injuries.¹

Most of those aneurysms are detected very early because of their superficial location in the neck that is easily noticeable by the patient or the physician.

Treatment options for carotid pseudoaneurysm include arterial reconstruction with a vein or prosthetic interpositional graft or an endovascular repair with a covered stent graft.^{2,3} In our case, we considered an open approach to reconstruct the common carotid artery. The surgery included an anterior approach with a proximal and distal control and excision of the entire aneurysm with primary repair of the lateral laceration (which was 4 mm in size). There was no indication of infection, so no culture of this pseudoaneurysm was performed. The pseudoaneurysm was conformed by pathological examination. Postoperatively, the patient did quite well without any neurological sequelae. His tone of voice recovered back to normal and his irritating cough even disappeared. Follow-up computed tomography angiogram demonstrated resolution of the pseudoaneurysm with widely patent carotid



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Competition of interest: none. (e-mail: liuweiguo618@gmail.com).

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J Vasc Surg 2012;55:240-1

0741-5214/\$36.00

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doi:10.1016/j.jvs.2010.09.026

artery (C). One-month follow-up showed that the patient recovered well.

REFERENCES

1. Guilbert MC, Elkouri S, Bracco D, Corriveau MM, Beaudoin N, Dubois MJ, et al. Arterial trauma during central venous catheter insertion: case series, review and proposed algorithm. *J Vasc Surg* 2008;48:918-25; discussion 925.
2. Chaer RA, Derubertis B, Kent KC, McKinsey JF. Endovascular treatment of traumatic carotid pseudoaneurysm with stenting and coil embolization. *Ann Vasc Surg* 2008;22:564-7.
3. Loffroy R, Gergele F, Rao P, Geschwind JF. Endovascular management of a posttraumatic pseudoaneurysm of the common carotid artery with superselective coil embolization. *J Vasc Surg* 2010.

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